

## **Additionality and Baseline**

As discussed in the Introduction to the Forest Management topic, the Workgroup's consensus approach to carbon sequestration and storage through forest management is for dual tracks, including both participation in a carbon offset market and a complementary carbon storage incentive program. [*Note: I'm suggesting moving to the introduction the discussion of the Workgroup's goals for carbon sequestration and storage through forest management, and the resulting consensus around a dual approach including both an offset program and a complementary program.*] The Workgroup acknowledges the importance, in a compliance-based carbon offset market, of the general principle of additionality [*see ref. if needed*]. Establishing an appropriate baseline is critical to demonstrating additionality. The Workgroup evaluated several approaches to establishing baselines for forest management offsets. All approaches have strengths and weaknesses when applied to forest management.

As an element of the dual approach, which achieved consensus by the Workgroup, the Workgroup recommends that a "business as usual" (BAU) baseline, and "beyond business as usual"(BBAU) additionality, as described below, is one option available to landowners wanting to participate as offset providers.

A BAU approach to baseline must include:

- An evaluation of the entity's historical and current practice of silviculture and market participation.
- A projection of the entity's potential future carbon stores, using growth and yield models and actual harvest data, based on assumptions reflecting its historical and current practices, including the current regulatory structure. In the absence of historical information regarding past practices, an entity could establish a baseline projection based on a combination of management practices from other entities in a similar forest type and from other properties the entity currently manages outside of that forest type.
- Additionality measured as the difference between the projection of carbon stocks in the baseline scenario and predicted changes in carbon stocks over time, based on modeling of a new set of management practices. The prediction of the results of new practices would be verified by periodic measurement of actual conditions.

The main advantage of a BAU approach to baseline for forest management offsets is that it conforms to common practice for offsets in other sectors, and holds the promise that the forest management offset is truly additional to what would have occurred without the offset payment. The main disadvantage of a BAU approach to baseline for forest management offsets is that it relies on potentially speculative predictions about what will happen in a complex forest system subject to the influences of variable market, management, and natural influences over a long period of time.

The Workgroup recognizes that the BAU-as-baseline approach may not provide carbon storage incentives to some forest landowners that already maintain higher than average carbon stocks in forests of greater age, due to economic limitations on increasing carbon storage further. For example, in the case of these landowners it may be difficult from the standpoint of responsiveness to timber markets to accumulate greater in-forest carbon by letting the forest grow longer and thereby miss a competitive timber market window. It may also be difficult for these landowners to reduce current in-forest carbon stocks and shift carbon storage toward the forest products pools, given the Workgroup's policy recommendation (see below) for no net long-term reduction in in-forest carbon pools for management strategies that focus additionality on the wood products pools.

It is in recognition of difficulties such as these that the Workgroup consensus is for a dual approach, including a Complementary Carbon Storage Incentive Program, which is envisioned to provide greater participation opportunities, especially to landowners with above-average current stores of carbon, while also maintaining important co-benefits of these forests. While the Complementary Program will balance the impact of a BAU approach to baseline for forest landowners, it will mean that there are fewer forest offsets available to be utilized as a cost control mechanism in the cap-and-trade system.

In the event that the Complementary Carbon Storage Incentive Program is not implemented as recommended, the Workgroup's consensus position is that the goals for broad forest landowner contribution to the state's greenhouse gas emission reduction goals still be met. Therefore, in that event, the Workgroup recommends further work on alternative methods for establishing forest carbon offset baselines to help achieve goals through the offset mechanism. Further work will include information gathering, such as a study of the current carbon storage profile of all forest landowner types and scenarios for the future, evaluating sensitivity to assumptions about land conversion, and holding collaborative stakeholder discussions.

For example, alternative approaches for the Complementary Program could be based on landowners voluntarily maintaining or increasing carbon stores above common practices, in the face of management options that would result in lower carbon stores. For example, the Workgroup has evaluated the concept of a "regional mean" as one potentially valid method for establishing baselines in the future, if current data limitations can be overcome such that landowners can be disaggregated sufficiently to enable comparisons of their carbon storage with an appropriate average. While there may be a risk of including some BAU carbon in a resulting offset, this risk could be balanced by appropriate discounting and by recognition of the continuing contribution of participating forest landowners toward meeting state climate goals.